

2-730-A Site Summary - Big Break Complex**2-730-A****County:** Contra Costa **ACP Division/Segment:****NOAA Chart:** 18661 Sacramento / San Joaquin River **Map Book:****Decimal Degrees:** 38.019088 -121.720192**Site Description:**

This site includes the emergent salt-marshes in the San Joaquin River, unnamed flood channels east of Antioch Bridge, and Big Break including the adjacent portion of Dutch Slough up to and including lower Marsh Creek. The salt-marshes in the River are recently colonized sediment bars. The west side marsh is a formerly diked area. It is separated from Big Break by a dike and access channel to Big Break Marina. Big Break is a large, flooded area. The perimeter islands and shoreline are emergent salt-marsh, particularly on the southern and eastern edges. It is separated from the San Joaquin and Dutch Slough by an intermittent series of berm islands, the remnants of the old levee. East Bay Regional Park District (EBRPD) maintains the shoreline area to the southeast (Big Break Regional Shoreline).

Resources at Risk:*ESI and Habitat:* 10A Salt - and brackish-water marshes

9B Vegetated low banks

6B Riprap

List of Resources at Risk:

	Resource Name	Status	Presence	Sensitivity
Birds	California black rail	FP, ST		Mar-Aug
Fish	longfin smelt	ST		Mar-May
Fish	steelhead - Central/Northern California	FT		Nov-Apr
Fish	delta smelt	FT, SE		Mar-May
Plants	Mason's lilaeopsis	SR		Apr-Nov
Plants	Suisun marsh aster	SSSP		May-Nov
Plants	Delta tule pea	SSSP		May-Jul
Reptiles	giant garter snake	FT, ST		Jul-Oct

FT-Federally Threatened, FE-Federally Endangered, FP-Federally Protected, SE-State Endangered, ST-State Threatened, SP -State Protected, SR-State Rare, SSC-Species of Special Concern, BGEPA-Bald and Golden Eagle Protection Act, SSSP-State Special Status Species

List of Key Contacts:

Type	Name/Title	Organization	Phone
C	/Coordinator	Native American Heritage Commission	(916) 373-3710
C	/Coordinator	Northwest Information Center	(707) 588-8455
E	/Office	Big Break Marina	(925) 679-0900
E	/Dispatch, 24-hr	East Bay Regional Park District	(510) 881-1833
O	/Dispatch, 24-hr	California Department of Water Resources	(916) 574-2714
S	/Dispatch, 24-hr	Contra Costa County Office of the Sheriff	(925) 646-2441
T	/Environmental Program Manager	CA Dept. of Fish & Wildlife, Bay Delta Region	(707) 576-2837
T	/Oil Spill Point of Contact	NOAA National Marine Fisheries Service	(707) 480-3496
T	/Restoration Ecologist	US Department of Agriculture	(530) 304-2304
T	/Spill Response Coordinator	USFWS, SF Bay-Delta Office	(916) 799-0588

C – Cultural, Historic, Archaeological; E – Entry/Owner/Access; O – Other; S – Safety; T – Trustee; X – Exclusion or Security

Additional Site Summary Comments:

Concerns and Advice to Responders:

This is an extensive marshland complex with sensitive shorelines and sensitive species. Once oil enters these embayments, it will be nearly impossible to collect, cleanup or rehabilitate. The strategies are aimed at keeping oil out of the salt-marshes. Operations should be aware that rare species are present and should avoid damaging salt-marsh vegetation and tracking oil into marshes and sediments.

Hazard and Restrictions:

Numerous uncharted snags and submerged obstacles exist in this area. Air traffic beware of high wires in vicinity.

Site Strategies:**Site Validation Level: II**

Strategy: 2-730.1 Objective: Exclude oil from entering open waters of Dutch Slough, Big Break and west flooded area by exclusion/diversion boom openings.

Strategy: Close the three openings to the extended site:

1. Boom the mouth of the west side marsh with 400' 9X9+ exclusion/deflection boom configured in a shallow chevron "V" using a mid-boom anchorage.
2. Boom the opening to Big Break with 3000' 9X9+ exclusion boom from the mouth of Big Break Marina channel to the islands at the mouth of Dutch Slough.
3. From the island at the mouth of Dutch Slough, deploy 1500' 9X9+ collection/exclusion boom at a long diagonal to the Jersey Island shore. Use 2 to 4 mid-boom anchors to keep the boom from relaxing into a catenary curve. Establish a land-based skimming operation at the Jersey Island levee. Back this collection with second layer of boom, sorbent and/or water-based skimmers, if first collection boom fails to intercept the oil.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		4900	feet	
Boom	Sorbent			1500	feet	
Anchor	Danforth	22 lb		15		
Vessel	Boom Boat			2		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			8		

Strategy: 2-730.2 Objective: Deflection on ebb: Deflect oil away from entrance to Dutch Slough and Big Break into main channel to deter oil from entering.

Strategy: Above the entrance to Dutch Slough, Cascade enough 200'- 500' segments of harbor boom from Jersey Island to deflect oil into deep channel and away from Dutch Slough mouth.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		2500	feet	
Anchor	Danforth	22 lb		15		
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

Strategy: 2-730.3 Objective: Protective booming of marsh front: west side marshes

Strategy: Deploy 3600' 6X6+Swamp boom along the salt-marsh shoreline east of marinas at the toe of the Antioch Bridge. Link this boom with the 9x9+ exclusion boom at the opening to the west flooded area.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Swamp	6x6 inch		3600	feet	
Anchor	Danforth	22 lb		8		
Vessel	Boom Boat			1		
Vehicle	Skiff or Punt			1		
Staff	Staff to Deploy			5		

Strategy: 2-730.4 Objective: Deflection On Flood: deflection to past site and keep it in the main channel

Strategy: For oil approaching site from west, cascade 200'- 500' segments of 9X9 Harbor boom beginning near the Antioch Bridge out toward and in front of shallow water and salt-marsh islands. Keep oil deflected into main channel of river.

Table of Response Resources

Equipment	Sub-Type	Size	Unit	QTY	Unit	Last Page Update
Boom	Harbor	9x9 inch		2500	feet	
Anchor	Danforth	22 lb		6		
Vessel	Boom Boat			1		
Vessel	Skiff or Punt			1		
Staff	Staff to Deploy			5		

Logistics:

Directions: Access primarily by water from the San Joaquin River, Dutch Slough or Big Break Marina. Limited land access via a few roadways on the southerly margin: Take hwy 4 toward Oakley, turn N on Big Break Road to Big Break Marina.

Land Access: Land access is poor with the exception of Jersey Island.

On-Water Limitations: Good access via water, just beware of submerged hazards. Launch is available at all marinas near Antioch Bridge and at Big Break Marina.

Facilities, Staging Areas, Command Posts, Available Equipment: There are several good sites for staging: Dutra Dredge at Big Break Marina, area marinas. Marine and other facilities are abundant nearby.

Communications Problems: Good cell reception in area.

